Hotel Carbon Measurement Initiative (HCMI)

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Hotel Carbon Measurement Initiative

What is it?

- Initiative to unite hotel industry efforts to calculate and communicate carbon emissions from guest rooms and meeting space in a uniform way

Why is it being done?

- Provides a reputable voluntary methodology to respond to corporate RFPs, individual travellers, and government

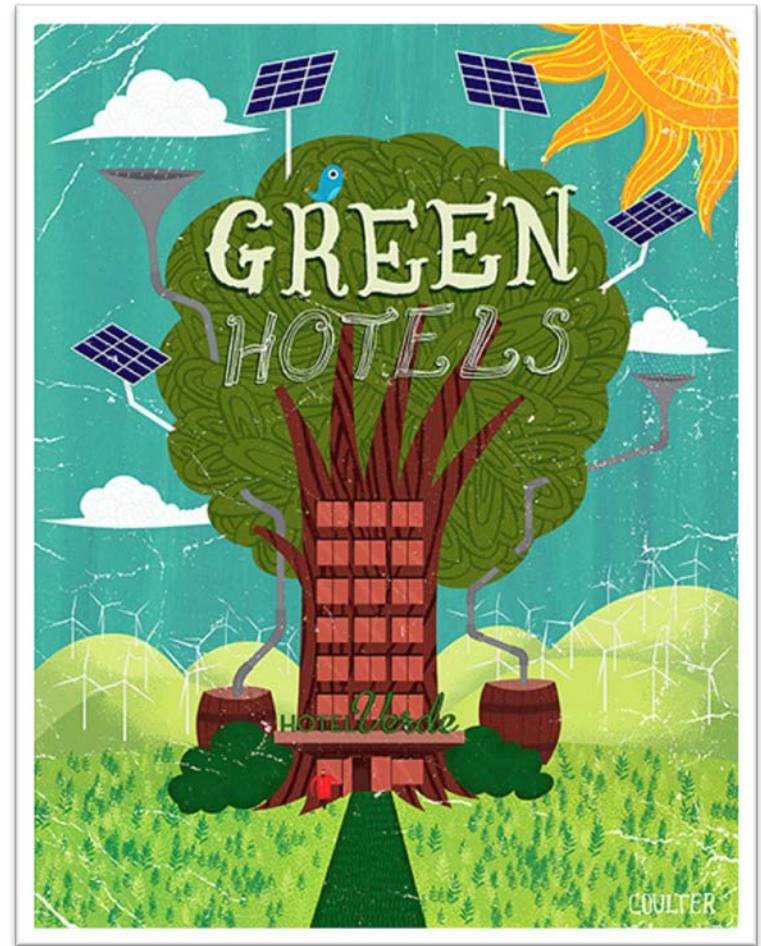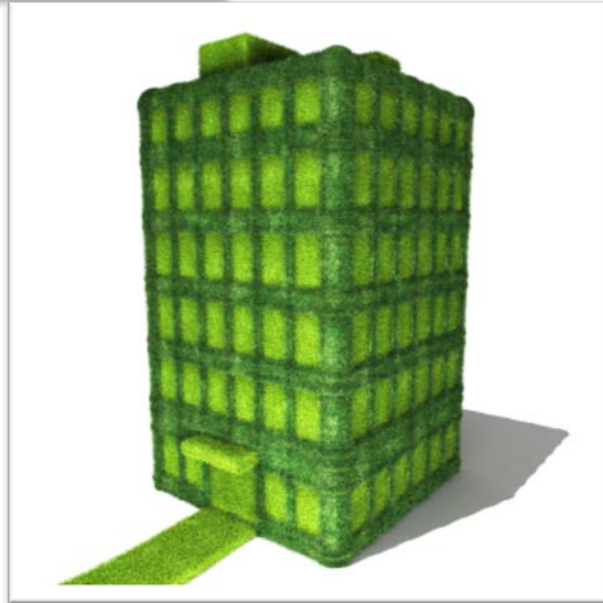- Creates transparency in reporting

The Facilitators

- The **International Tourism Partnership** brings together leading international hotel companies to provide a voice for environmental and social responsibility in the industry.

- **World Travel & Tourism Council** is the global authority on the economic and social contribution of Travel & Tourism.

- **KPMG** is a global network of professional firms providing Audit, Tax, and Advisory services, operating in 152 countries.
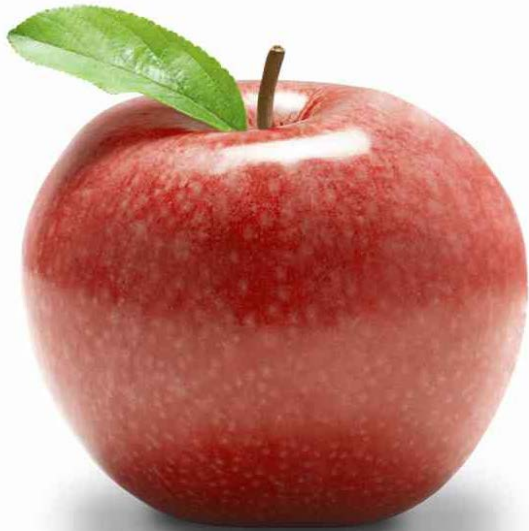
The Working Group Members
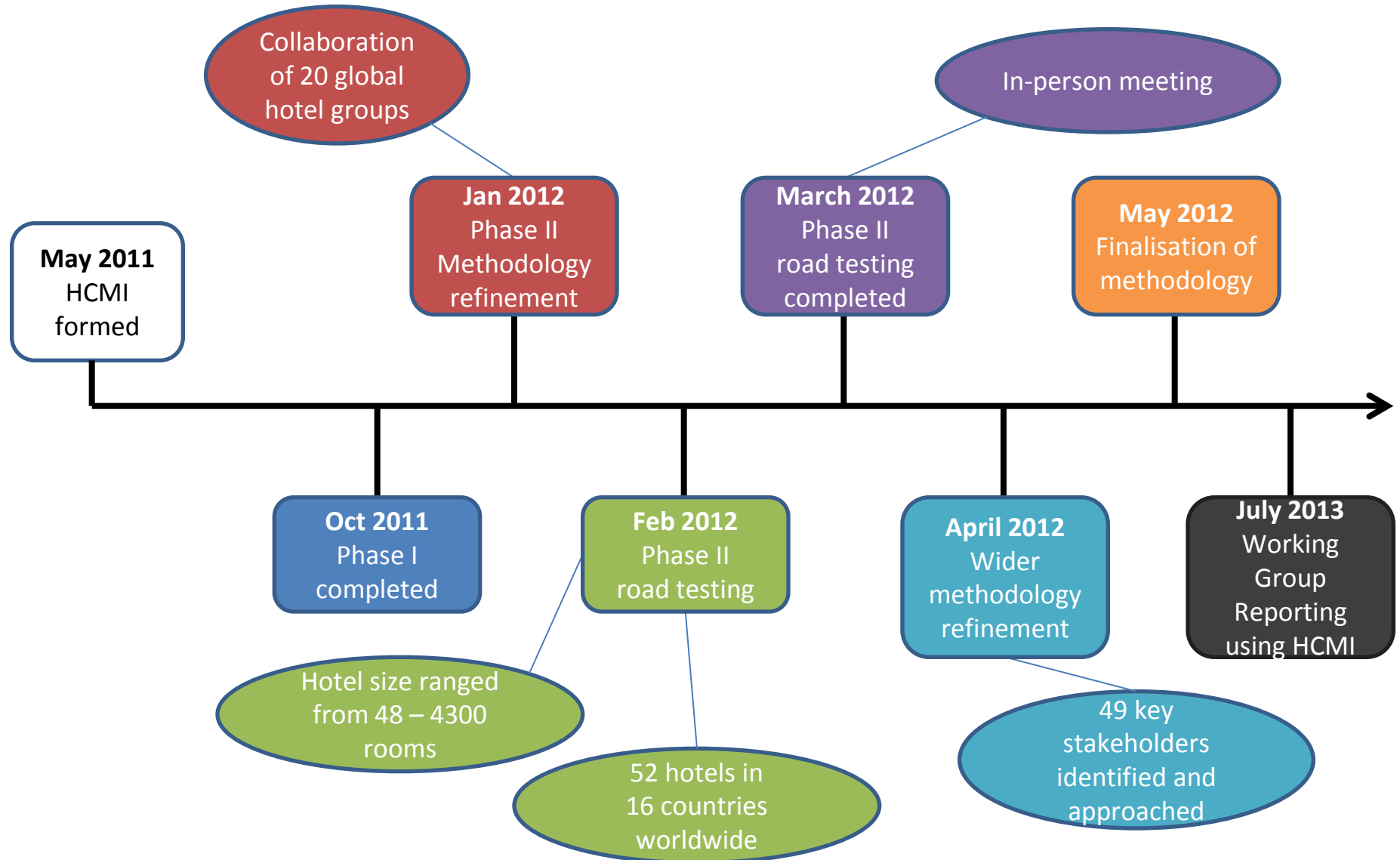
Definition of Green Hotels?

Initiative Progress

May 2011
HCMI formed

Collaboration of 20 global hotel groups

Jan 2012
Phase II Methodology refinement

Oct 2011
Phase I completed

Hotel size ranged from 48 – 4300 rooms

In-person meeting

March 2012
Phase II road testing completed

Feb 2012
Phase II road testing

52 hotels in 16 countries worldwide

May 2012
Finalisation of methodology

April 2012
Wider methodology refinement

49 key stakeholders identified and approached

July 2013
Working Group Reporting using HCMI

Methodology

Standing data
+
Annual data
+
Supplementary data

- Reporting year, conditioned area, guest room area, meeting room area
- Occupied rooms, energy consumption, emission factors
- Outsourced laundry, private space

Apportionment of consumption between rooms and meeting space

Remaining space

Apportion

Guest room space

Meeting space

Convert to carbon using emission factors

Apportion footprint to clients

Total annual guest room footprint (incl. Apportioned space)	Total annual meeting space footprint (incl. Apportioned space)
÷ reporting year occupancy	÷ 365 days ÷ 10 hours
Footprint per room per night	**Meeting room footprint per hour**
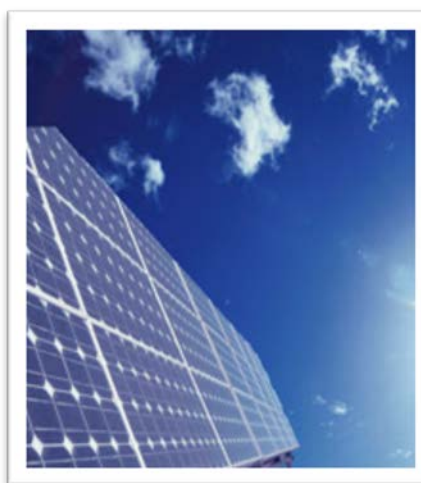
Emissions Factors

Carbon Footprint per kWh

ELECTRICITY CLEANLINESS

330

g CO2e / kWh

910
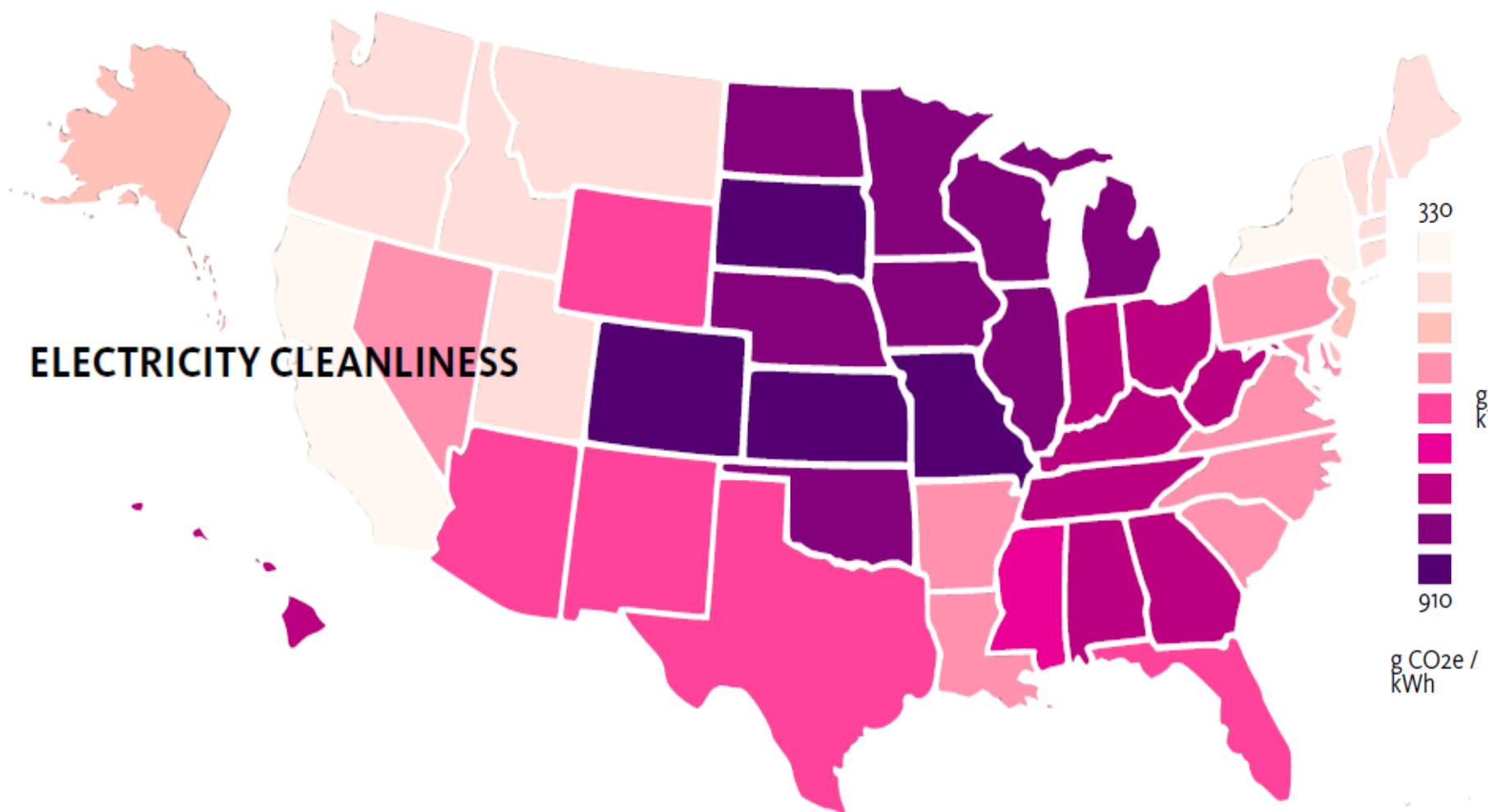
Calculating Carbon Footprint

Footprint Per Occupied Room

X

Number of Occupied Rooms

=

Carbon Footprint For Hotel Stays

Footprint Per Square Foot Per Hour

X

Square Footage of Meeting Space Used

X

# of hour utilized

=

Carbon Footprint For Meeting

Calculating Multiple Hotels & Meetings

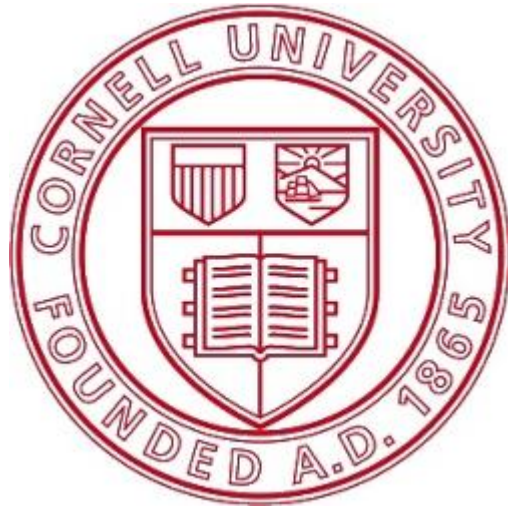|	
Carbon Footprint For Hotel Stay - A	**Carbon Footprint For Meeting 1**
+	**+**
Carbon Footprint For Hotel Stay - B	**Carbon Footprint For Meeting 2**
+	**+**
Carbon Footprint For Hotel Stay - C	**Carbon Footprint For Meeting 3**
=	**=**
Hotel Footprint	**Meeting Footprint**

Roll-up Report Example

PropertyName	Please enter number of room nights	Room Night Carbon Factor (lbs CO2e per occupied room-night)	Total lbs CO2e from accommodation
Westfields Marriott Washington Dulles	100	99.18	9918
Wichita Marriott	20	225.75	4515
Winston-Salem Marriott	15	106.00	1590
World Golf Village Renaissance St. Augustine Resort	5	125.03	625
Worsley Park, A Marriott Hotel & Country Club	1250	103.36	129203
Yeouido Park Centre, Seoul - Marriott Executive Apartments	1000	192.66	192661
York Marriott Hotel		68.16	
Zurich Marriott Hotel		37.77	
			338513

Cornell Benchmarking Study

GEOGRAPHY		Upscale/Upper Upscale/Luxury				
Region	**Country**	**Count**	**High**	**Median**	**Low**	**SD**
Atlanta	USA	38	81.9	30.0	17.8	13.2
Baltimore	USA	11	33.8	19.0	16.2	5.9
Boston	USA	23	81.1	19.9	14.4	13.8
Charlotte	USA	12	27.9	18.2	15.3	4.9
Chicago	USA	53	112.8	30.1	20.2	18.0
CHINA		23	235.0	122.7	62.9	50.7
Cincinnati	USA	17	56.4	29.8	24.3	7.9
Dallas	USA	35	62.3	26.6	17.1	9.9
Denver	USA	19	52.5	30.3	22.7	10.0
Detroit	USA	13	49.2	28.1	23.2	6.5
Hong Kong-Shenzhen-Macau	CHINA	5	298.5	108.1	85.6	86.3
Houston	USA	26	57.9	27.3	20.1	10.7
Indianapolis	USA	12	51.4	26.1	19.0	10.0
Kansas City	USA	12	68.4	37.7	26.2	11.9
Los Angeles	USA	23	47.2	16.2	12.2	7.6
Miami	USA	28	84.8	28.3	16.1	14.5
New Orleans	USA	11	36.8	29.3	15.7	6.2
New York City	USA	47	54.4	17.8	9.3	9.4

Why HCMI?

- HCMI was developed by industry, for industry, specifically for hotels

- Involved global stakeholders in process

- It uses the metrics of the Global Business Travel Association – 4000 companies pulling data into RFP

- It can be used by any hotel anywhere in the world

- Over 18,000+ hotels worldwide are using HCMI already; more added daily

- It is robust and transparent

- It is free for both hoteliers and customers!

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